REMARKS

In response to the outstanding Office Action, Paper No. 20031124, dated December 10, 2003, applicant has carefully studied the references cited by the Examiner and the Examiner's comments relative thereto.

Claims 1, 18, and 19 have been amended.

Claims 1, 4, and 7-22 remain in the application for consideration by the Examiner.

No new matter has been added.

Reconsideration of the application is respectfully requested.

Applicant's attorney acknowledges acceptance and thanks the Examiner for accepting the drawings received by the Patent Office on August 11, 2003.

The Examiner rejected Claims 1, 4, and 7-22 under 35 USC §103(a). The Examiner stated:

> "Claims 1,4,7-8, 11-12, and 16-22 are rejected under 35 USC l03(a) as being unpatentable over Kamada (USPN 5720073) in view of Sacks (USPN 5245724) and Kamada (USPN 5720073) in view of Rivin et al. (USPN 6003193).
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> Kamada teaches a mop bucket (80) and wringer apparatus (10) for wringing a liquid from a mop. The wringer has an upwardly opening for receiving a mop and is defined by front, rear and side (50a, 50b) walls. There are passageways that are on some of the walls to allow liquid to pass through (figure 9). There is a rack (30) which pressure jaws (40) are mounted to. The rack keeps the pressure jaws in a spaced apart horizontal disposition whereby vertical movement of the rack causes the pressure jaws toward and away from each other. At least one of the side walls is proved with slots (56a, 56b) for vertically guiding the rack. A pinion (20) is affixed to a side wall of the wringer for effecting movement of the rack and the associated pressure jaws. An elongate elastic spring means (76) is attached to the at least one of the side walls and the pinion urging the pinion in a position to cause the pressure jaws to be moved away from each other. The rear wall of the wringer has a handle (14) attached thereto to which movement of the handle starting the wringing process. The front wall of the bucket has a curved portion allowing for easy pouring. When the wringer is placed on three sides of the bucket a seal is formed preventing any leaking of liquid. Kamada teaches all of the essential elements of the claimed invention however fails to teach that the spring is elastomeric.
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> Sacks teaches an apparatus for wringing mops that comprises an elastomeric plastic material as the biasing means. Sacks also teaches that the biasing means maybe in the form of coil springs (col. 9, lines 49-54). Therefore it would have been obvious to use an elastomeric material as the biasing means in Kamada' s invention since it has been held within the general skill of a worker in the art to select a know material on the basis of its suitability for the intended use as a matter of obvious engineering choice. *In re Leshin.* 125 *USPQ* 416.
>
> Rivin et al. teaches a clutch comprising a coiled spring to allow movement between the shaft and gear. Another embodiment may comprise an elastomeric member as the biasing means (abstract). Since both a coiled spring and an elastomeric member have been taught to be interchangeable, it would have been obvious to use an elastomeric member as the biasing means in Kamada' s invention. Additionally, it has been held within the general skill of a worker in the art to select a know material on the basis of its suitability for the intended use as a matter of obvious engineering choice. *In re Leshin, 125* ***USPQ*** 416.

Claims 1, 4, 7-8, 11, 14, and 16-22 rejected under 35 USC .lO3(a) as being unpatentable over Bard (USPN 2199906) in view of Sacks (USPN 5245724) and Bard (USPN 2199906) in view of Rivin et al. (USPN 6003193).

Bard teaches a mop bucket and wringer apparatus for wringing liquid from a mop (col. 3, lines 12-17). The wringer has an upwardly opening for receiving a mop and is defined by front, rear and side walls (figure 1). There are passageways that are on some of the walls to allow liquid to pass through (figure 1). There is a rack (19) which pressure jaws (16) are mounted to. The rack keeps the pressure jaws in a spaced apart horizontal disposition whereby vertical movement of the rack causes the pressure jaws toward and away from each other. At least one of the side walls is proved with slots (14) for vertically guiding the rack. A pinion (24) is affixed to a side wall of the wringer for effecting movement of the rack and the associated pressure jaws. An elongate elastic spring means (26) is attached to the at least one of the side walls and the pinion urging the pinion in a position to cause the pressure jaws to be moved away from each other. The rear wall of the wringer has a handle (25) attached thereto to which movement of the handle starting the wringing process. The bottom wall of the wringer is of the stepped configuration (figure 1, element 11). When the wringer is placed on three sides of the bucket a seal is fanned preventing any leakage of liquid. Bard teaches all the essential elements of the claimed invention however fails to teach that the spring is elastomeric.

Sacks teaches an apparatus for wringing mops that comprises an elastomeric plastic material as the biasing means. Sacks also teaches that the biasing means may be in the form of coil springs (col. 9, lines 49-54). Therefore it would have been obvious to use an elastomeric material as the biasing means in Bard's invention since it has been held within the general skill of a worker in the art to select a know material on the basis of its suitability for the intended use as a matter of obvious engineering choice. *In re Leshin, 125 USPQ* 416.

Rivin et al. teaches a clutch comprising a coiled spring to allow movement between the shaft and gear. Another embodiment may comprise an elastomeric member as the biasing means (abstract). Since both a coiled spring and an elastomeric member have been taught to be interchangeable, it would have been obvious to use an elastomeric member as the biasing means in Bard's invention. Additionally, it has been held within the general skill of a worker in the art to select a know material on the basis of its suitability for the intended use as a matter of obvious engineering choice. *In re Leshin.* 125 *USPQ* 416.

Claims 1-22 are rejected under 35 USC lO3(a) as being unpatentable over Taylor (USPN 5333353) in view of Kamada (USPN 5720073) and in further view of Sacks (USPN 5246724) and Taylor (USPN 5333353) in view of Kamada (USPN 5720073) and in further view of Rivin et at. (USPN 6003193).

Taylor teaches a mop wringer and bucket device, wherein the bucket is provided with slots (82) for guiding the vertical movement of the wringer with respect to the mop bucket. The wringer has downwardly extending extensions (80) that are to be received within the slots. The bucket also includes a handle (figure 12) and a curved portion (76) forming a pouring spout. The handle may be used to attach the device to a toilet or a sink basin. The bucket also includes a stepped bottom wall (66) and side walls with corners (figure 12). The wringer sits on three sides of the bucket thus forming a seal to prevent any liquid from leaking. Taylor teaches all the essential elements of the claimed invention however, Taylor fails to teach the specifics of the wringer. After examining Taylor's figures closely it can be seen that the wringer used comprises pressure jaws and vertical slots to guide the pressure jaws (figure 10). Kamada in view of Sacks and Kamada in view of Rivin teach a wringer having an upwardly opening for receiving a mop and is defined by front, rear and side (50a, 50b) walls. There are passageways that are on some of the walls to allow liquid to pass through (figure 9). There is a rack (30) which pressure jaws (40) are mounted to. The rack keeps the pressure jaws in a spaced apart horizontal disposition whereby vertical movement of the rack causes the pressure jaws toward and away from each other. At least one of the side walls is proved with slots (56a, 56b) for vertically guiding the rack. A pinion (20) is affixed to a side wall of the wringer for effecting movement of the rack and the associated pressure jaws. An elongate elastomeric

spring means (76) is attached to the at least one of the side walls and the pinion urging the pinion in a position to cause the pressure jaws to be moved away from each other. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the wringer as taught by Kamada in view of Sacks and Kamada in view of Rivin in place of the wringer disclosed in Taylor, since it appears from the figures that the Taylor's wringer functions and is configured in essentially the same manner as Kamada in view of Sacks and Kamada in view of Rivin. Additionally, Kamada in view of Sacks' and Kamada in view of Rivin's wringer has an increased force from the pressure jaws to thoroughly squeeze liquid from the mop head.

Claims 1-22 are rejected under 35 USC lO3(a) as being unpatentable over Taylor (USPN 5333353) in view of Bard (USPN 2199906) and in further view of Sacks (USPN 5246724) and Taylor (USPN 5333353) in view of Bard (USPN 2199906) and in further view of Rivin et al. (USPN 6003193).

Taylor teaches a mop wringer and bucket device, wherein the bucket is provided with slots (82) for guiding the vertical movement of the wringer with respect to the mop bucket. The wringer has downwardly extending extensions (80) that are to be received within the slots. The bucket also includes a handle (figure 12) and a curved portion (76) forming a pouring spout. The handle may be used to attach the device to a toilet or a sink basin. The bucket also includes a stepped bottom wall (66) and side walls with comers (figure 12). The wringer sits on three sides of the bucket thus forming a seal to prevent any liquid from leaking. Taylor teaches all the essential elements of the claimed invention however, Taylor fails to teach the specifics of the wringer. After examining Taylor's figures closely it can be seen that the wringer used comprises pressure jaws and vertical slots to guide the pressure jaws (figure 10). Bard in view of Sacks and Bard in view of Rivin teaches a wringer having an upwardly opening for receiving a mop and is defined by front rear and side walls (figure 1). There are passageways that are on some of the walls to allow liquid to pass through (figure 1). There is a rack (19) which pressure jaws (16) are mounted to. The rack keeps the pressure jaws in a spaced apart horizontal disposition whereby vertical movement of the rack causes the pressure jaws toward and away from each other. At least one of the side walls is proved with slots (14) for vertically guiding the rack. A pinion (24) is affixed to a side wall of the wringer for effecting movement of the rack and the associated pressure jaws. An elongate elastomeric spring means (26) is attached to the at least one of the side walls and the pinion urging the pinion in a position to cause the pressure jaws to be moved away from each other. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the wringer as taught by Bard in view of Sacks and Bard in view of Rivin in place of the wringer disclosed in Taylor, since it appears from the figures that the Taylor's wringer functions and is configured in essentially the same manner as Bard in view of Sacks and Bard in view of Rivin. Additionally, Bard in view of Sacks' and Bard in view of Rivin's wringer ensures that the pressure jaws will remain in alignment and will act in a continuously smooth manner."

Independent Claims 1, 18, and 19 recite in part "a member formed of an elastomer and tensioned to normally urge . . .". Kamada, Bard, and Taylor all clearly fail to disclose a member formed of an elastomer, which is echoed by the Examiner's comments in the outstanding Office Action. Sacks discloses pushers 24 produced from an elastomeric material. However, the "pushers" are not tensioned. From the specification of Sacks:

"The pushers 24 serve to move the bearings 16 for the shaft 15 of the roller of the wringing member 4 toward the member 5 when the lever 8 is pivoted in the direction of arrow Pf1."

As the name suggests, the pushers "push" the bearings and are compressed, but are not placed in tension. Metal coil springs 28 are provided to return the bearings to a normal resting position. The member formed of an elastomer claimed by applicant as previously argued in the August 7 Amendment is a surprising and significant improvement over the metal coil springs due to ease of operation, manufacturing, replacement, and resistance to corrosion.

The pushers disclosed in Sacks are constructed of a flexible material merely to facilitate the convoluting thereof onto a rotary collecting element. The specification, in discussing the convoluting of the pusher, actually specifically teaches away from using the pusher structure in a rack and pinion type or other conventional type mop wringer systems:

> "In fact, each pusher 24 can be fully convoluted onto the respective component 23 so that only its first or front portion continues to extend into the socket 30 of the respective bearing 16. An advantage of pushers which can be convoluted onto rotary collecting elements 22 is that the moving means 7 occupies a relatively small amount of space. This is in contrast to aforediscussed conventional wringing apparatus wherein the means for moving one of the wringing members relative to the other wringing member comprises a rack and pinion drive with a reciprocable rack which moves back and forth in response to rotation of the pinion." (column 7, lines 56-68)

Thus, there is no teaching or even a remote suggestion in Sacks to combine it with the other references cited by the Examiner. The independent Claims 1, 18, and 19 are directed to patentable subject matter which is not obvious in the light of the teachings of Kamada in view of Sacks, over Bard in view of Sacks, over Taylor in view of Kamada and in further view of Sacks, or over Taylor in view of Bard and in further view of Sacks. Since Claims 1, 18, and 19 are directed to patentable subject matter, Claims 4, 7-17, and 20-22 which depend, directly or indirectly therefrom, are deemed to be patentable.

Rivin et al. is simply non-analogous art. The structure disclosed in Rivin et al. is a windshield wiper mechanism for an automobile. Aside from using hindsight, one would not be led to use the structure disclosed in Rivin et al. with a mop wringing mechanism or combine the structure with the other references cited by the Examiner. Additionally, "elastomeric" is used only in the Abstract of the reference. An elastomer is defined by The Random House Dictionary as "an elastic substance occurring naturally, as natural rubber, or produced synthetically, as butyl rubber or neoprene". Nowhere in Rivin et al. is such a structure shown or described. Only a metal spring is disclosed, which is clearly outside of the definition. It is unclear how an elastomeric material could be used in the structure disclosed in Rivin et al. Specifically, Rivin et al. states:

"During normal operation, that is, when the wiper shaft 125 is able to rotate freely, the spring 210 acts as a means for coupling the wiper gear 123 to the wiper shaft 125 such that the rotational force of the wiper gear 123 can be imparted to the wiper shaft 125. However, if the wiper shaft 125 becomes immobilized for any reason, such as if a wiper blade attached to the wiper shaft 125 becomes frozen because of ice buildup on a window of the vehicle, then further rotation of the wiper gear 123 causes a further torsion loading on the spring 210, which causes the spring 210 to decrease in diameter to the point where it contacts the outer surface 125a of the wiper shaft 125, as shown in FIG. 14b. Thus, the flexibility of the spring 210 and the clearance between the inner diameter of each coil of the spring 210 and the outer surface 125a of the wiper shaft 125 allow the wiper gear 123 to be rotated even if the wiper shaft 125 is immobilized for any reason. This in turn permits the worm gear 65 (FIG. 2) to be driven in both rotational directions by the motor 51 to perform the various other functions capable of being performed by the apparatus 41, such as controlling operation of the liftgate window release and the lift gate lock. Were it not for the degree of movement of the wiper gear 123 allowed by the spring to 210, once the wiper shaft 125 became immobilized no further motion of the worm gear 65, spur gear 117, cam 107, cam 105 or helical gear 73 would be possible." (see col. 7, lines 14-39) (emphasis added)

It is unclear how an elastomeric member can transmit the rotational force of the wiper gear to the wiper shaft as described and how the elastomeric member can permit the worm gear to be driven in both rotational directions as described, and such a use is not disclosed in the Rivin et al. reference. Short of impermissible hindsight, there is no motivation to combine Rivin et al. with the other references cited by the Examiner. Therefore, independent Claims 1, 18, and 19 distinguish from and are considered to be unobvious over Kamada in view of Rivin et al., over Bard in view of Rivin et al., over Taylor in view of Kamada and in further view of Rivin et al., or over Taylor in view of Bard and in further view of Rivin et al. Since Claims 1, 18, and 19 are deemed to be directed to patentable subject matter, Claims 4, 7-17, and 20-22 which depend, directly or indirectly therefrom, should also be patentable.

The Examiner's favorable reconsideration of the rejections based upon 35 USC §103(a) is respectfully requested.

Claims 1, 18, and 19 were also amended for clarity.

It is submitted that the claims, as amended, distinctly define the applicant's invention. Reconsideration of the application is respectfully requested. Accordingly, a formal Notice of Allowance is solicited.

While the applicant's attorney has made a sincere effort to properly define applicant's invention and to distinguish the same from the prior art, should the Examiner deem that other language would be more appropriate, it is requested that a telephone interview be had with the applicant's attorney in a sincere effort to expedite the prosecution of the application.